

# इंटरनेट

# मानक

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IS 4119 (2008): Press - Charcoal Burning [MTD 31: Utensils, Cutlery and Domestic Hardwares]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक  
प्रेस — लकड़ी कोयले से जलने वाली — विशिष्टि  
( तीसरा पुनरीक्षण )

*Indian Standard*  
PRESS — CHARCOAL BURNING —  
SPECIFICATION  
( *Third Revision* )

ICS 97.060

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**BUREAU OF INDIAN STANDARDS**  
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## FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Utensils, Cutlery and Domestic Hardware Sectional Committee had been approved by the Mechanical Engineering Division Council.

This standard was first published in 1967 and was subsequently revised in 1987 and 1995. In the present revision, lot size and sample size has been modified.

The composition of Committee responsible for the formulation of this standard is given at Annex C.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

# Indian Standard

## PRESS — CHARCOAL BURNING — SPECIFICATION

### ( Third Revision )

**1 SCOPE**

This standard covers the requirements of press, charcoal burning.

**2 REFERENCES**

The following standards contain provisions, which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

<i>IS No.</i>	<i>Title</i>
210 : 1993	Grey iron castings — Specification ( <i>fourth revision</i> )
280 : 1978	Specification for mild steel wire for general engineering purposes ( <i>third revision</i> )
292 : 1983	Specification for leaded brass ingots and castings ( <i>second revision</i> )
513 : 1994	Cold-rolled low carbon steel sheets and strips ( <i>fourth revision</i> )
620 : 1985	Specification for wooden tool handles — General requirements ( <i>fourth revision</i> )
1068 : 1993	Electroplated coatings of nickel plus

*IS No.**Title*

	chromium and copper plus nickel plus chromium ( <i>third revision</i> )
2062 : 1999	Steel for general structural purposes — Specification ( <i>fifth revision</i> )
2500 (Part 1) : 2000	Sampling inspection procedures : Part 1 Attribute sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection ( <i>third revision</i> )
2998 : 1982	Specification for cold forged steel rivets for cold closing (1 to 16 mm diameter) ( <i>first revision</i> )
4905 : 1968	Methods for random sampling
6760 : 1972	Specification for slotted countersunk head wood screws

**3 TYPES**

The press shall be of the following types:

- a) Press, laundry;
- b) Press, tailor; and
- c) Press, domestic.

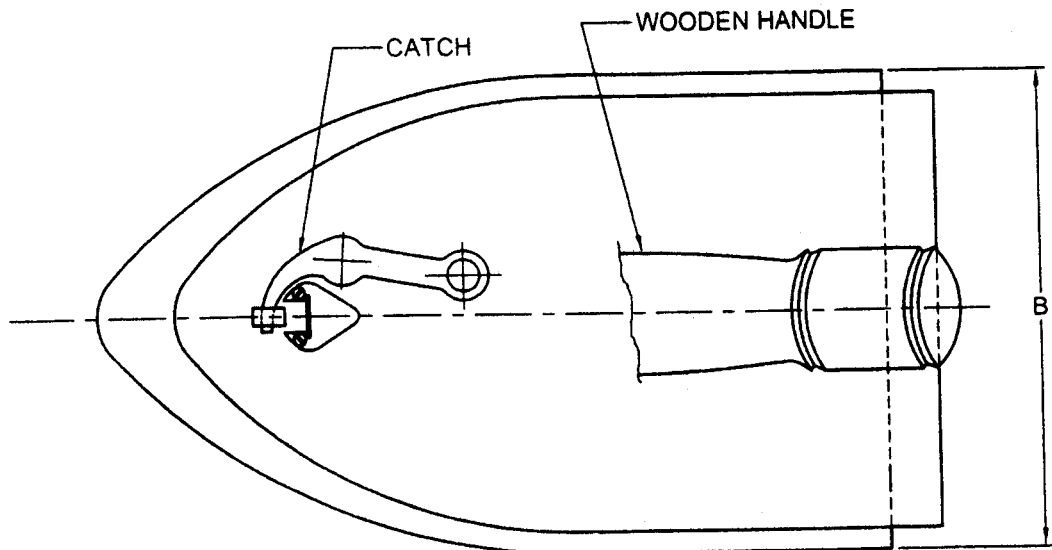
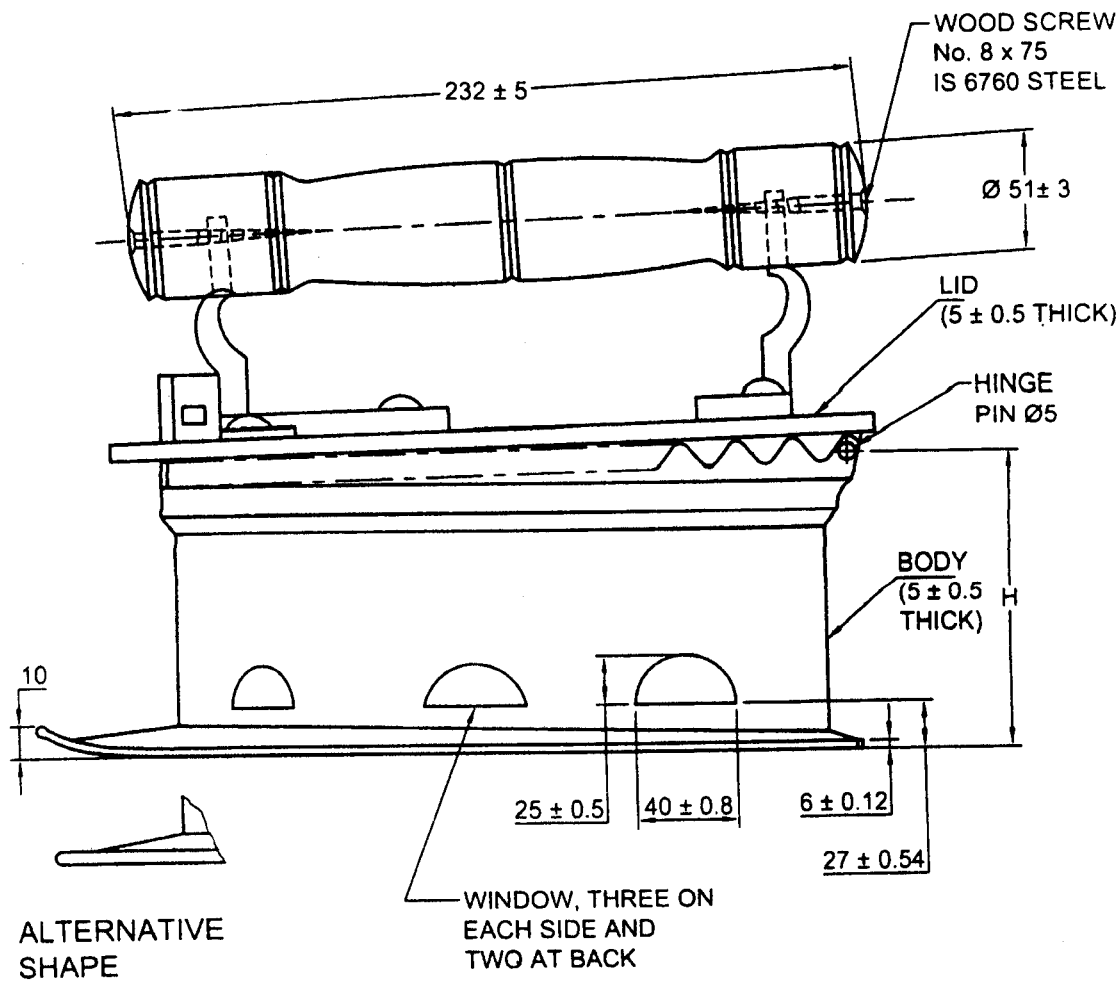
**4 MATERIALS**

The various components of press shall be made from the following materials:

<i>Component</i>	<i>Material</i>	<i>Conforming to</i>
Body and lid	Cast brass or Cast iron	Designation LCB 2 of IS 292  Grade Fe 260 of IS 210
Catch	Cast brass or Mild steel	Designation LCB 2 of IS 292  IS 2062, IS 513
Hinge pin	Mild steel	Condition 'Hard' or IS 280
Handle	Timber	Any one of the species given for Class 5 handles of IS 620
Rivets	Mild steel	IS 2998
Fire grate	Cast iron	Grade Fe 200 of IS 210
Screw wood	Mild steel	IS 6760

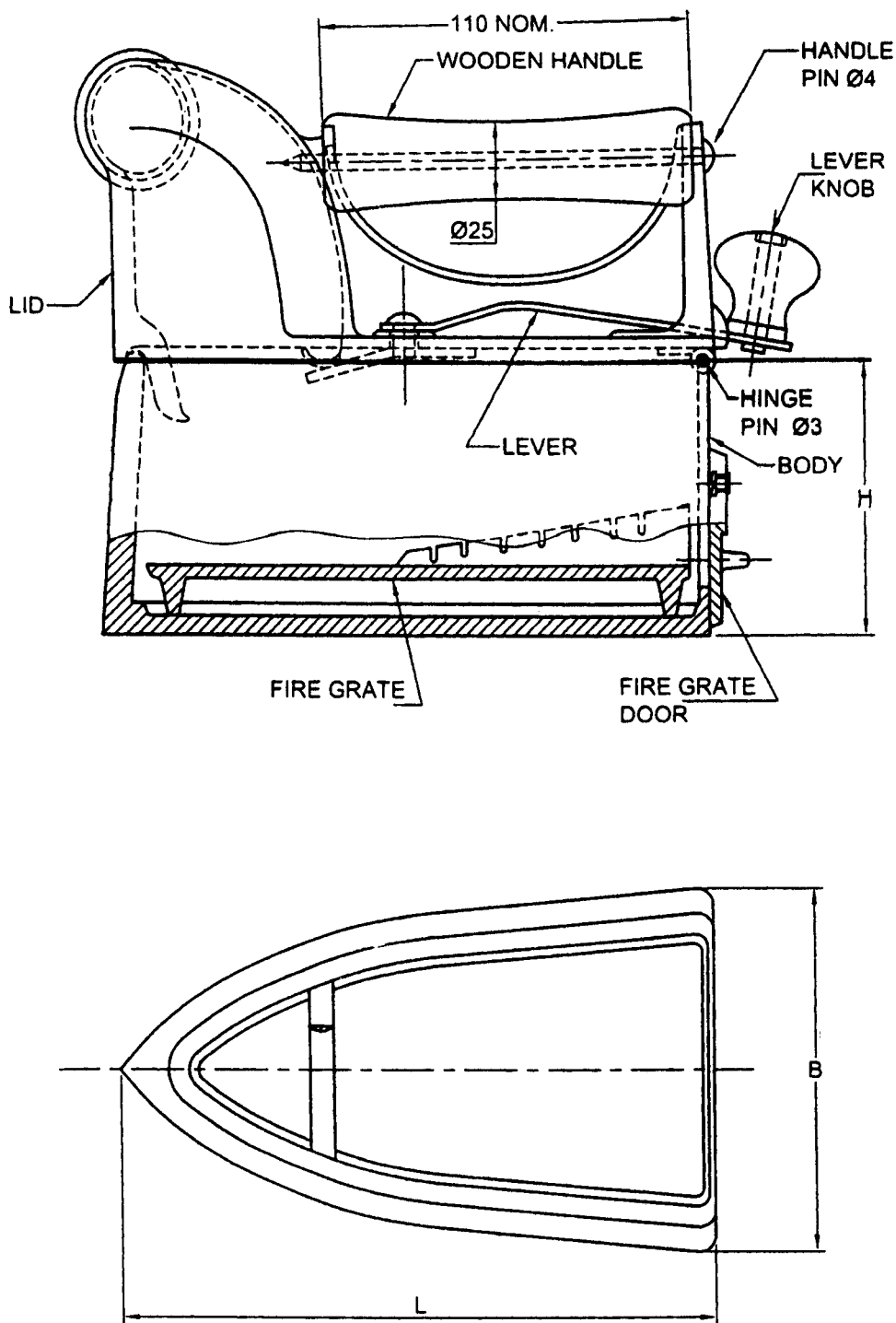
5 SHAPE, DIMENSIONS AND MASS

The shape, dimensions and mass shall be as given in Fig. 1 to Fig. 4, and Table 1.



All dimensions in millimetres.

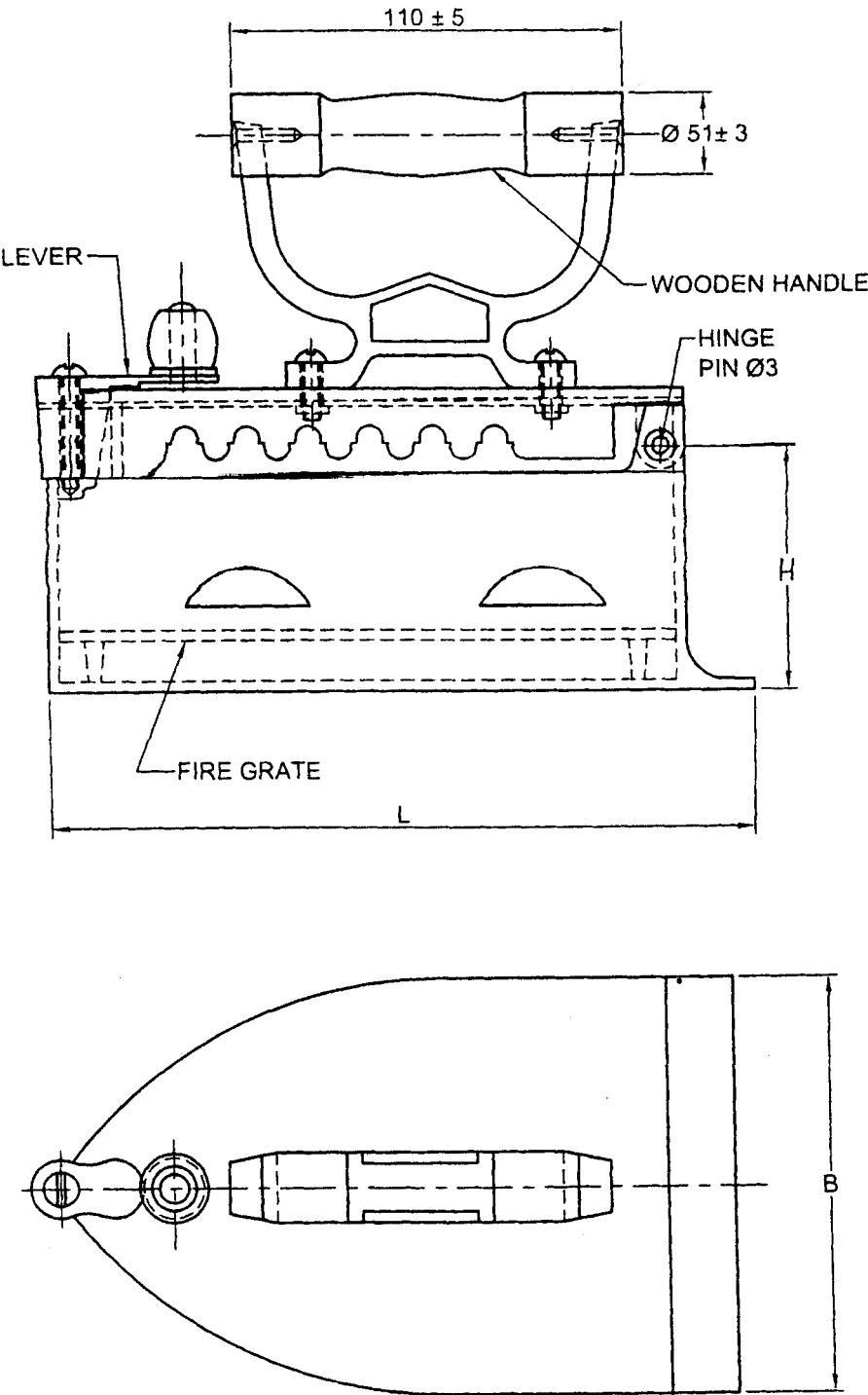
FIG. 1 PRESS, LAUNDRY



All dimensions in millimetres.

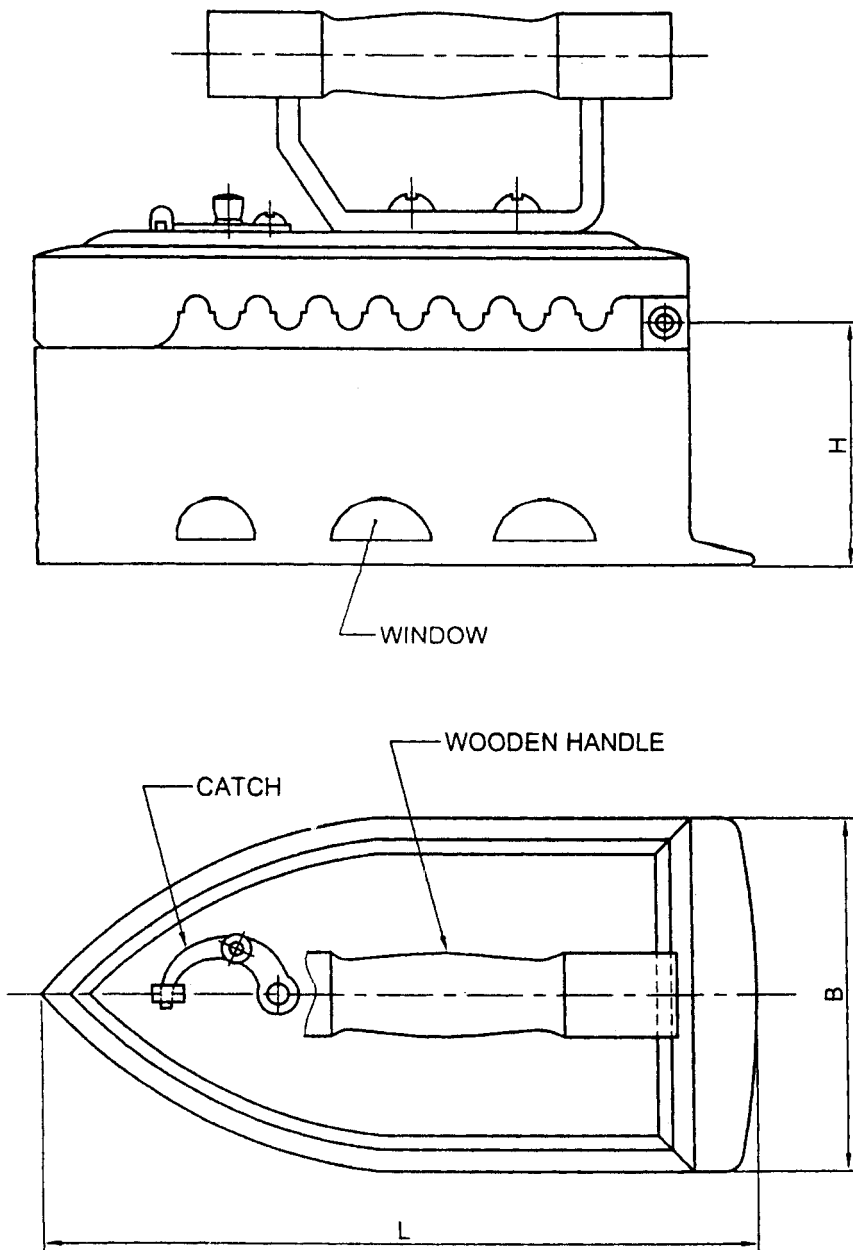
FIG. 2 PRESS, TAILOR





All dimensions in millimetres.

FIG. 3 PRESS, DOMESTIC



All dimensions in millimetres.

FIG. 4 PRESS, DOMESTIC TYPICAL

**Table 1 Dimensions and Mass of Charcoal Burning Press***(Clause 5)*

Sl No.	Type of Press	Commercial Designation	Mass Percent	Body Dimensions			Thickness of Bottom Plate
				Length mm	Breadth mm	Height mm	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
i)	Press, laundry	18 W	9 ± 3	275 ± 5	185 ± 5	105 ± 5	10 ± 2 <sup>1)</sup>
ii)	Press, tailor	6.5 T	3.25 ± 3	170 ± 5	105 ± 5	80 ± 3	5 ± 1
		7.5 T	3.75 ± 3	180 ± 5	110 ± 5	80 ± 3	5 ± 1
iii)	Press, domestic	5.5 D	2.75 ± 3	190 ± 5	95 ± 3	80 ± 3	4 ± 0.5
		6.0 D	3.00 ± 3	200 ± 5	100 ± 3	80 ± 3	4 ± 0.5
		6.5 D	3.25 ± 3	210 ± 5	105 ± 3	80 ± 3	4 ± 0.5
		5.5 D1	2.75 ± 3	170 ± 5	125 ± 5	65 ± 3	4 ± 0.5
		6 D1 <sup>2)</sup>	3.00 ± 3	180 ± 5	135 ± 5	65 ± 3	5 ± 1.00
		6.5 D1	3.25 ± 3	195 ± 5	145 ± 5	65 ± 3	5 ± 1.00

<sup>1)</sup> When clad, the total thickness of bottom shall remain the same.<sup>2)</sup> Shapes of these shall generally be same as that for press, laundry.

## 6 MANUFACTURE, WORKMANSHIP AND FINISH

### 6.1 Manufacture

The press shall be manufactured from cast iron or cast brass. In case of cast iron press laundry, if so desired by the purchaser, the case bottom may be clad with brass keeping the total minimum thickness of bottom plate same as specified in Table 1. Body, lid, catch and brackets for the handle shall be neatly and soundly cast to the shape and size. The base of the body shall be machined and the bracket handle shall be securely riveted to the lid by tightly drawn and neatly shaped rivets. The handle shall be smoothly turned to shape and dimensions and tightly fitted to its brackets and secured by means of screws shown in Fig. 1 to Fig. 4. Lock nuts shall be provided in the handle bolts. The edges and corners of base at the bottom shall be rounded to avoid damage of the clothes during pressing.

**6.1.1** The tip of the laundry press shall be raised by 10 mm above the bottom level. The lid of the laundry press shall have an additional thickness of 2 mm on its underside in the centre in the form of a circular boss of 100 mm dia.

**6.1.2** The smoke funnel in tailor's press shall be of adequate dimensions and shall open itself on the far side of the iron. The mechanism to hold the lid with the body shall also be fool proof and shall have no shake or play.

**6.1.3** The grate in domestic press shall have

adequate dimensions and shall be properly fitted inside the body.

### 6.2 Workmanship

The body and the lid shall match each other. The lugs and hinge pin shall be free from any distortion so that the lid opens and closes with uniform movement. A catch with wooden knob shall be fitted to the lid in a proper position so that the end is in alignment with the hole of the lug for press domestic locking arrangement as shown in Fig. 3. The lug on the body and the slot for the lug on the lid shall be accurately laid so that the lid registers fully and centrally on the rim of the body. The various components shall be assembled with good workmanship so that the operator does not feel any undue strain when either opening or closing the press or using it for pressing the cloth. There shall be no chance of any spark of fire escaping from the body resulting in burning of the cloth.

### 6.3 Finish

The casting shall be free from blow holes, pits, crack and other casting defects. The bottom of the plate shall be finished smooth and true. Sharp edges and corners shall be rounded. The handle and the knob shall be properly shaped so as to give comfortable grip and shall be finished smooth. The outer surface of the body lid, bracket, handle, catch lever and other components shall also be finished smooth. They shall be given a treatment of 10 percent copper naphthenate and in addition, two coats of varnish.

**6.3.1 Press, Laundry**

Cast iron and clad press shall be plated chromium over nickel with copper base in accordance with Service Grade 2 of IS 1068.

**6.3.2 Press, Tailor**

The lid, catch and the fire grate door shall be given two coats of suitable heat-resistant paint.

**6.3.3 Press, Domestic**

Cast iron domestic press shall be plated chromium over nickel with copper base in accordance with Service Grade 2 of IS 1068.

**7 TESTS**

The press shall be filled to the top by a good quality IMLI charcoal pieces approximately 25 mm<sup>2</sup> size and then lighted. The press shall attain the required working temperature for cotton cloth within 15 min and shall maintain this temperature *for at least 45 min before it requires recharging*. The base plate shall be heated uniformly and there shall be no charring or staining of cloth in normal use. After use of three consecutive charges, the sample shall not show any spots, cracks, distortion or other defects.

**7.1 Thermal Shock Test**

When clad, the press shall meet the test covered in Annex A.

**8 MARKING**

8.1 Each press shall be legibly and indelibly embossed with the indication of the source of

manufacture and designation while casting. When specifically required by the purchaser, press shall also be marked with the year of manufacture and any other information, desired.

**8.2 BIS Certification Marking**

Each press may also be marked with the Standard Mark.

8.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

**9 PACKING**

The bottom of the press shall be protected by means of corrugated cardboard. The unpainted portion of cast iron parts may also be given a thin coating of grease. Complete press shall be packed in a thick strong polyethylene bag and further wrapped by water-proof paper. They shall be packed in wooden case in numbers and required by the purchaser in such a manner that empty spaces be filled with suitable materials so as to avoid any damage.

NOTE — The press may also be packed as agreed to between the purchaser and the supplier.

**10 SAMPLING**

Unless otherwise agreed to between the purchaser and the supplier, the sampling plan shall be as given in Annex B.

**ANNEX A**

(Clause 7.1)

**THERMAL SHOCK TEST**

A-1 The press shall be kept in an oven to attain  $275 \pm 25^\circ\text{C}$ . Thereafter, the press shall be removed and dipped immediately in water maintained at room temperature (ambient

temperature). The process shall be repeated five times and at the end of the process, the brass cladding shall not show any signs of peeling off or coming off.

**ANNEX B***(Clause 10)***SAMPLING AND CRITERIA FOR CONFORMITY****B-1 LOT**

In any consignment, all the presses of the same type, dimension and mass made out of the same material produced under essential similar conditions, shall be grouped together to constitute a lot.

**B-2 SCALE OF SAMPLING**

Lot size and sample size shall be as per general

inspection level II of Table 1 of IS 2500 (Part 1) for examination of dimensions, mass, workmanship and finish. One sample per lot for coating test as per 6.3, distortion as per 7 and thermal shock test as per 7.1 shall be selected. These samples shall be selected from the lot at random and in order to ensure the randomness of selection, procedures given in IS 4905 may be followed. It shall be ensured that lots containing 2.5 percent or less defective will be accepted.

**ANNEX C***(Foreword)***COMMITTEE COMPOSITION**

Utensils, Cutlery and Domestic Hardware Sectional Committee, MED 33

<i>Organization</i>	<i>Representative(s)</i>
Office of Development Commissioner, New Delhi	SHRI J. K. ARYA ( <b>Chairman</b> )
	SHRI S. K. DAS ( <i>Alternate</i> )
Aligarh Lock Manufacturers and Traders Association, Aligarh	SHRI NIVAS AGARWAL
Central Public Works Department, New Delhi	SHRI SURINDER KUMAR
Controllerate of Quality Assurance (GS), Kanpur	SHRI SANJAY KAKKAR
	SHRI NAND LAL RAM ( <i>Alternate</i> )
Federation of Consumer Organization, Thiruchirapalli	SHRIMATI S. SAKUNTALA
Gangadharan Appliances Ltd, Chennai	SHRI V. M. KUMARESAN
	SHRI K. SIVASUBRAMANIAN ( <i>Alternate</i> )
Godrej & Boyce Manufacturing Co Ltd, Mumbai	SHRI T. S. MURALI
	SHRI K. R. GAIKAR ( <i>Alternate</i> )
Hawkins Cookers Ltd, Pune	SHRI M. A. TECKCHANDANI
	SHRI N. J. AMANNA ( <i>Alternate</i> )
Hindalco Industries Ltd, Dist Sonebhadra	SHRI V. K. AGARWAL
India Tourism Development Corporation Ltd, New Delhi	SHRI ADITYA BHASKAR
J. K. Metal Industries, Jagadhari	SHRI SATISH GARG
	SHRI BHARAT GARG ( <i>Alternate</i> )
Ministry of Railways, New Delhi	SENIOR COMMERCIAL OFFICER
Ministry of Science and Technology, New Delhi	DR A. K. CHAKRAVORTHY
Rationale Iron and Steel Corporation, Kanpur	SHRI S. K. SRIVASTVA
	SHRI R. N. TRIPATHY ( <i>Alternate</i> )
Republic Engineers, Delhi	SHRI M. P. SINGH
Sat Rattan Engineering Works, New Delhi	SHRI G. L. KHERA
Steel Authority of India, Salem	SHRI T. KALYANASUNDARAM
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Swastik Metal Rolling Mills, Pune	SHRI HIRACHAND N. RATHOD
	SHRI SANTOSH H. RATHOD ( <i>Alternate</i> )
TTK Prestige Ltd, Bangalore	SHRI B. V. SHENOY
	SHRI R. B. RAO ( <i>Alternate</i> )
V. K. Surgicals, Indore	SHRI V. K. BHARGAVA
BIS Directorate General	SHRI C. K. VEDA, Scientist 'F' and Head (MED) [Representing Director General ( <i>Ex-officio</i> )]

*Member Secretary*

SHRI T. V. SINGH  
Scientist 'E' (MED), BIS

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

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#### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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